XXIII. Addlitions to a kinoulcdlyc of the Family Cicadidæ. By W. L. Distant.
[Read June 1st, 1904.]

## Plates XXIX and XXX.

The following descriptions refer to species of Cicadidx which have reached me from various sources during the last few years. Foremost among these, I may mention a small collection made and forwarded to me by Mr. P. W. Mackinnon, at Mussooree, N.W.P., India, which contained no fewer than five new species, a revelation after the mass of material which passed through my hands a decade ago, when preparing my "Monograph of the Oriental Cicadida." An undescribed Cicuda from Bombay has also been sent by Mr. R. M. Dixon. I am indebted to Col. Bingham for two new species collected by Mr. Craddock at Pahang, in the Malay Peninsula, while my friend Dr. Heath has again enriched my collection with a number of new species principally from the Ethiopian region.

## Subfamily CICADINAE.

Platyplewra mackinnoni, sp. n. (Pl. XXIX, fig. 1, a,b.)
Head and pronotum ochraceous; head with the lateral margins of front, face-excluding basal spot, anterior lateral margins of vertex, and a broad transverse fascia between eyes including the area of the ocelli, black; pronotum with the basal margin stramineous, its dise with a central longitudinal fascia much broadened at base, and the incisures, black; mesonotum pale castaneous, with two anterior, fused, obconical spots, on each side of which is a longer obconical spot, and a large curved basal spot with its apex prolonged, black ; basal cruciform elevation pale castaneous with its central area black; abdomen black, apex and margins of the tympana ochraceous; legs, rostrum, posterior margins of abdominal segments and apical segment (more or less) ochraceous.

Tegmina pale talc-like, the venation ochraceous on basal half, piceons on apical area, extreme basal area piceous; wings pale hyaline, the venation ochraceous, about basal third piceous streaked with ochraceous.

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t. Opercula almost meeting interiorly, their lateral and posterior margins oblique, their apices reaching the base of the second abdominal segment.
Long. excl. tegm. of and $\uparrow+25$ millim. Exp. tegm. 75 millim.
Hab. India; Mussooree-Dehra Dun (P. W. Mackinnon -18-6-1903).

## Platyplcura makaga, sp.n. (Pl. XXIX, fig. 4, a, b.)

ㅇ. Head, pronotum, and mesonotum brownish-ochraceous ; pronotum with two broken and centrally subobsolete longitudinal lines, and the incisures, black; mesonotum with two anterior linear obconical spots, on each side of which is a much smaller angulated spot, and a small round spot in front of the anterior angles of the basal cruciform elevation, llack; abdomen above black, the basal central area and margins of the segments brownish-ochraceous; body beneath and legs brownish-ochraceous.
Tegmina opaque, brownish-ochraceous, with greyish mottlings, the most conspicuous of which are two spots in the radial area, a central spot in the two upper ulnar areas, a large central spot on apical margin, and another spot near inner angle, the apical margin is distinctly infuscate; wings castaneous, the margins, abdominal area, veins on basal area, and ray-like spots on outer area pale piceous, a grey spot on posterior margin.

Head including eyes about as broad as anterior margin of mesonotum; lateral margins of pronotum angularly ampliated; rostrum reaching the second abdominal segment.

Long. excl. tegm. $\quad$. 29 millim. Exp. tegm. 90 millim.

## Hab. Congo; Bopoto.

I have not yet seen the male of this species. I am indebted to my friend Dr. Heath for the type.

## Platypleura adouma, sp.n. (Pl. XXIX, fig. 2, a, b.)

ㅇ. Head, pronotum, and mesonotum brownish-ochraceons; head with the area of the ocelli, a radiating line to eyes and two frontal spots, piceous; pronotum with two central longitudinal lines-fused posteriorly, and the incisures black; mesonotum with two central obconical spots on anterior margin, on each side of these a smaller spot, a linear spot followed by a rounded spot on lateral areas, and a spot in front of anterior angles of the basal cruciform elevation, black; abdomen above dark castaneous, the apical margins of some of the segments ochraceous; body beneath and legs brownishochraceous.

Tegmina opaque, fuscous, irrorated with brownish-ochraceous, and with piccous mottlings, of which the most prominent are two spots in radial area, and two irregularly-sized spots in the two upper ulnar areas; the most prominent pale markings are in the radial area, in the two upper ulnar areas, a sub-apical spot, a central spot to apical margin and a spot near inner angle ; wings ochraceous, the outer and posterior margins dark castaneous, the veins and abdominal area fuscous.

Head including eyes slightly narrower than anterior margin of mesonotum ; lateral margins of pronotum ampliated but not angulated; rostrum reaching the fourth abdominal segment.

Long. excl. tegm. ㅇ. 21 millim . Exp. tegm. 65 millim.
Hab. Congo-no precise locality.
I have two female specimens, but have not seen the other sex.

Ugada præcellens. (Pl. XXIX, fig. 5, a, b.)
Platypleura praceellens, Stîl, Trans. Ent. Soc. Lond., 1863, p. 572.

ㅇ. Head, pronotum, and mesonotum dark obscure olivaceous; head with two central and two basal-angular spots to front, and vertex with a transverse broken linear fascia between eyes, and a spot behind each eye, black; pronotum with two small obconical spots on anterior margin, a spot at centre of anterior margin, two discal spots, the incisures, and the anterior area of lateral margins black; mesonotum with two anterior obconical spots on each side of which are two smaller spots, two discal spots, and irregular spots in front of basal cruciform elevation, black; abdomen dark ochraceous the anterior segmental margins broadly black; legs ochraceous-brown, abdomen marked much as above.

Tegmina with about basal lialf pale green, basal spots, an oblique broad irregular fascia dividing the green area, and almost the whole of the apical half tawny-brown, the last with a few paler spots; wings dark purplish-brown, with two elongate creamy spots on posterior margin.

Rostrum mutilated; lateral margins of the pronotum broadly angularly ampliated; head including eyes much narrower than base of mesonotum.

Long. excl. tegm. ㅇ. 28 millim. Exp. tegm. 87 millim.

## Hab. Sierra Leone.

An unlocalized female specimen here described and figured was presented to me by Dr. E. A. Heath some few years ago. I lave waited since that time for further
details as to locality, and for the chance acquisition of a representative of the other sex, but neither of these wishes was gratified. Professor Poulton, however, has now kindly forwarded the type of Stil's species contained in the Oxford Museum, and I am thus enabled to figure his very rare $P$. praccllens.

The description of the genus Ugada and some other allied genera will appear elsewhere, almost simultaneously with this paper.

## Pyena muma, sp.n. (Pl. XXIX, fig. 3, a, b.)

ㅇ. Head, pronotum, and mesonotum pale greyish-virescent; a central black longitudinal fascia extending from the ocelli to the base of the pronotum, pronotal incistres more or less black; mesonotum with two obscure anterior obcouical spots, two spots in front of basal cruciform elevation, and a fascia on posterior half of lateral margins, piceous; abdomen above piceous, a central fascia, apex, and lateral marginal spots, virescent ; body beneath and legs pale greyish-virescent ; base and apex of face, apex of rostrum, apical annulation to femora, central annulation to tibie, and bases and apices of tarsi, black.

Tegmina with about basal half dull ochraceous, opaque, mottled with brown, a pale lacteons spot in radial cell ; apical area pale lyaline or talc-like, the veins ochraceons, and with small fuscous spots and other markings; wings with about basal two-thirds ochraceous, outwardly margined with castaneous, and with some longitudinal rays of the same colour ; apical area pale lyyaline with the veins ochraceous.

Head including eyes consilerably narrower than anterior margin of mesonotum ; lateral margins of pronotum strongly angularly produced; rostrum reaching the anterior margin of the fifth abdominal segment.

Long. excl. tegm. q. 24 millim. Exp. tegın. 70 millim.

## Mab. Mashonaland; Umtali (G. A. K. Marshall).

Mr. Marshall sent me a female specimen a few years ago; as I have not received the male since that time, I now describe the species.

## Pycna hccuba, sp. n. (Pl. XXIX, fig. 6, a, b.)

\$. Head, pronotum, and mesonotum greenish-ochraceous; area of the ocelli, a broken longitudinal fascia, a large spot on anterior lateral margins, and the incisures to pronotum black; mesonotum with two anterior pale castaneous obconical spots, on eaclı side of which is a black spot, and a transverse series of four black spots in
front of the basal cruciform elevation ; abdomen above ochraceous, with transverse more or less broken black fascir; head weneath, sternum, opercula, and legs greenish-ochraceons; apices of tarsi black ; abdomen beneath as above.

Tegmina with about basal third greenish-ochraceous, opaque, mottled with brown and with a transverse brown fascia at its extremity; remaining area semi-hyaline, the veins and other macular markings fuscous; wings with about basal half ochraceous, with a large piceous spot on its outer margin, remaining area semi-hyaline, the veins ochraceous.

Heal including eyes much narrower than anterior margin of mesonotum ; lateral margins of pronotum strongly angularly ampliated ; rostrum mutilated ; opercula broad and short, not passing the posterior margin of the first abdominal segment and a little overlapping at their inner angles.

Long. excl. tegm. む. 25 millim. Exp. tegm. 73 millim.
Hab. EAst Africa; Kikuya.
Cosmopsaltria lihadiga, sp. n. (Pl. XXX, fig. 9,,$b$.)
Body somewhat short and broad, brownish-ochraccous; head with transverse fasciate lines to front, and suffusions on disc of vertex, pronotum with two central longitudinal lines and the incisures, mesonotum with two obconical spots on anterior margin, a large discal lanceolate spot between them, a spot on each side of them on anterior margin, a longitudinal fascia, profoundly notched anteriorly, on each lateral area, and a spot in front of anterior angles of basal cruciform elevation, abdomen with base and central spot to first segment, and central anterior margins of second and third segments, black; body beneath and legs pale ochraceous, a spot at inner margin of eyes and spots near base of rostrum, black.

Tegmina and wings pale hyaline, the venation fuscous.
ㅇ. Opercula long, reaching the apical abdominal segment, their apices angularly rounded, outwardly sinuate near base, inwardly slightly convex; face centrally sulcate, transversely striate ; rostrum reaching the posterior coxie.

Long. excl. tegm. đ. 29 millim. Exp. tegm. 85 millim.
Hab. Malay Peninsula; Pahang (Craddock).
I have to thank Col. Bingham for the series of specimens on which this species is founded. It is allied to C. tripurasura, Dist.

Pomponia surya, sp. n. (Pl. XXX, fig. 2, a, b.)
Head and mesonotum piceous; pronotum ochraceous; head with an apical spot to front, lateral margins of vertex, and the ocelli,
ochraceous; pronotum with two central longitudinal fasciæ, widened anteriorly and rounded and united posteriorly, the incisures, and large spots on posterior margin, piceous ; lateral margins of mesonotum and the cruciform elevation, ochraceous; abdomen brownishochraceous, greyishly pilose; body beneath and legs ochraceons, greyishly pilose.

Tegmina and wings pale hyaline, the venation fuscous, the tegmina with the transverse veins at apices of the two upper ulnar areas, infuscated.

お. Rostrum with its apex piceous and reaching the posterior coxæ; opercula placed distinctly apart, not passing the first abdominal segment.
Long. exel. tegm. đ. 25 ; ㅇ. 21 millim. Exp. tegm. of and to 66 millim.

Hab. India; Mussooree-5000 ft. (P. W. Mackinnon-30-5-1903).

Pomponia melanoptera, sp. n. (Pl. XXX, fig. 3, a, b.)
Head, pronotum, and mesonotum olivaceous green ; head with the anterior margin and a basal triangular spot to front, some reticulate lateral markings to vertex and the area of the ocelli, black ; pronotum with the basal and lateral margins dull ochraceous, with two central longitudinal waved black fasciæ, widened on anterior margin, united posteriorly, on each side of these are two oblique purplish spots, and some black marks on the lateral areas; mesonotum with two sets of central obconical spots arranged in pairs, a longer obconical spot on each side, four anterior marginal spots, and a central lateral and apical spot, black; basal cruciform elevation with its apices black ; abdomen black, above with a few obscure ochraceous spots and in the male with the anterior margin of the second abdominal segment and a spot at each side of anal segment, white ; sternum, rostrum, and legs olivaceous; transverse marginal striæ to face black ; opercula piceous.

Tegmina and wings pale hyaline, the first with the costal membrane and basal venation olivaceous, a fuscons spot at apices of ulnar areas, and a smaller fuscous spot a little before apices of veins to apical areas.
t. Rostrum reaching the third abdominal segment; opercula reaching the second abdominal segment not quite meeting interiorly.

Long. excl. tegm. of and $\circ$. 20 millim. Exp. tegm. 68 to 70 nillim.

Hab. India; Mussooree (P. W. Mackinnon-Sept. 1903).

Allied to $P$. expansa, Walk.

Cicada vesta, sp. n. (Pl. XXX, fig. 4, $a, b$.)
Head black, a central line to face and anterior nariow margin to vertex, ochraceous; pronotum castaneous, its posterior margin and a central longitudinal fascia margined with black, ochraceous; mesonotum black, two central, discal angulated fascire with a spot between them, and the basal cruciform elevation, ochraceous; abdomen above black; body beneath and legs pale ochraceous, greyishly pilose, opercula and anal segment bright ochraceous; apices of tibie and tarsi piceous.

Tegmina and wings pale hyaline, the venation ochraceous towards base and fuscous towards apex ; tegmina with the costal membrane ochraceous to apex of radial area and thence piceous, the basal cell and narrow bases of both tegmina and wings piceous.

Opercula about half the length of abdomen, their lateral margins somewhat strongly oblique, their apices truncately rounded, their inner margins meeting for about thirl of length and thence oblique to apices; rostrum about reaching the posterior coxæ.

Long. excl. tegm. đ̂. 28 ; ¢. 22 millim. Exp. tegm. đ. $80 ;$ ¢. 70 millim.

Hab. India ; Bombay (R. M. Dixon).
Cicada nigrans, sp. n. (Pl. XXX, fig. 1, $a, b$.)
Head black, eyes ochraceous; pronotum dark testaceous, with a central black fascia; mesonotum black, with two central linear obconical testaceous spots from which two slender rays emanate on each side ; abdomen black, posterior segmental abdominal margins testaceous; body beneath piceous, ochraceously pilose, opercula ochraceous; legs pale castaneous, apices of femora pale luteous.

Tegmina and wings pale hyaline, the venation fuscous or ochraceous; tegmina with the transverse veins at the apices of the three upper ulnar areas infuscated, and a small fuscous spot near apices of longitudinal veins to apical areas.

Opercula overlapping each other internally, rounded posteriorly but not extending beyond the apex of the basal abdominal segment; rostrum just reaching the posterior coxa ; face somewhat strongly transversely striate, and broadly centrally longitudinally impressed.

Long. excl. tegm. of and ㅇ. 27 millim. Exp. tegm. 75 to 78 millim.

## Hab. Madagascar; Fort Dauphine.

Macrotristria nigrosignata, sp. n. (Pl. XXIX, fig. 7, a, b.) ㅇ. Body castaneous ; posterior margin of pronotum, cruciform
elevation, posterior margins of abdominal segments, and the coxæ ochraceous.
Tegmina and wings talc-like, the venation ochraceous; basal cell, and basal streak to tegmina and extreme base of wings, black.
Face gibbous, obscurely striate ; rostrum just reaching the posterior coxe; anterior femora armed with two long robust spines beneath.

Long. exel. tegm. $\quad$. 34 millim. Exp. tegm. 100 millim.
Hab. West Australia; Cossack.
I have not seen the male of this fine species.

Subfamily TIBICENINAE.
Hanza, gen. nov.
d. With the appearance of the genus Platypleura, but with the tympana largely uncovered.

Body short, broad; head includiug eyes about as wide as the anterior margin of the mesonotum ; ocelli placed nearer each other than to eyes; pronotum with the lateral margins ampliated, obtusely angulated near middle; anterior femora distinctly tuberculately spined ; metasternum slightly elevated, broadly centrally sulcate, and sinuately truncated ; tympana only about half covered by the dilated and expanded lateral areas of the basal abdominal segment ; opercula short, broad, their apices convexly rounded ; tegmina with the basal cell broad, with at least four angles, ulnar veins widely separated at their bases.

Type, H. bourucnsis, Dist.

Hamza bourucnsis. (Pl. XXX, fig. 5, a, b.)
Platypleura bourucnsis, Dist., Ann. Mag. Nat. Hist. (7), vol. i, p. 97 (1898).
This species was originally described from a female specimen, and it is only since I have acquired examples of the male sex that I have seen its great generic division from Platypleura, which renders it a member of the T'ibiceninc. This is an instance so often relied on by some advocates of mimicry, a suggestion, at least in this casc, which would certainly not explain a strong case of superficial similarity in evolution.

Hab. Malay Archipelago; Bouru.

## Tibicen sankara, sp.n. (Pl. XXX, fig. 8, $a, b$.)

t. Head black, anterior margins and three small basal spots ochraceons, eyes and ocelli castaneous; pronotum castaneous, lateril and posterior margins, and two central spots both on anterior and posterior margins-divided by a pale ochraceous line, black; mesonotum and basal cruciform elevation black, the first with lateral margins and two anterior obconical spots only delineated by their margins, ochraceous; abdomen castaneous, greyishly pilose, the base and a central longitudinal fascia black; head beneath, sternum, and legs ochraceous; abdomen beneath castaneous.

Tegmina and wings pale hyaline, the venation fuscons or ochraceons, their bases narrowly oclraceous, wings with a small fuscous marginal spot near abdominal area.

Rostrum scarcely extending beyond the anterior coxa.
f. Body much darker in hue than in of lateral margins of abdomen beneath obscurely piceous.
Long. excl. tegın. ot. 18 ; 우. 20 millim. Exp. tegm. đ̂. 47 ; $\uparrow$. 52 millim.

Hab. India; Chamasari-5000 ft. (P. W. Mackinnon —May 1903).

Terpmosia ganesu, sp. n. (Pl. XXX, fig. 6, a, b.)
Body above lrownish-olivaceous; head with margins of front, area of ocelli, on each side of which is an oblique line, black; pronotum with two central longitudinal fascix, with a spot on each side of same and the incisures, black ; mesonotum with two anterior obconical spots, a straight longitudinal fascia continued from between them, a spot at each anterior angle of the basal cruciform elevation, and a broad continuous sub-lateral fascia preceded by a small spot on anterior margin, black ; abdomen above irregularly greyishly pilose, the extreme margins of the first and second segments, a central longitudinal spot on first segment, broad discal fascia to third segment, two small central spots on fourth, fifth and sixth segments, and lateral marginal spots, black ; body beneath and legs ochraccous, central fascia to face and the rostrum stramineous; apical spots to coxa, and basal and apical amulations to femora and tibie, black.
T'egmina and wings pale hyaline, venation fuscons or ochraceous, the tegnina spotted at apices of ulnar and apical areas.

Rostrum passing the posterior coxx; opercula oblique, not reaching apex of second abdominal segment, and not meeting inwardly.
Long. excl. tegm. ot. 26 millim. Exp. tegm. 70 millim.

Hab. India ; Mussooree (P.IV. Machinnon-15-4-1903). Allied to T. maculipes, Walk.

Terpnosia abdullah, sp. n. (Pl. XXX, fig. 7, a, b.)
Body pale ochraceous with the following black markings; viz. two snall anterior spots and a spot at each basal angle to front, the area of the ocelli, and a line at imer margin of eyes; two central longitudinal lines and the incisures to pronotum, a central line much widened medially, on each side of this an anterior curved line followed by two angulated spots and a large lateral curved spot to mesonotum, a small rounded spot in front of anterior angles of the basal cruciform elevation ; lateral margin of first and an oblique marginal spot to second abdominal segment, transverse spots to face, apices of femora, bi-annulations to tibie and tarsi, and base and apex of abdomen beneath.
Tegmina and wings pale hyaline, the renation ochraceous; the first with a black spot at base of upper ulnar area, and the transverse veins at the apices of the two upper ulnar areas, infuscated; opercula small and obliquely rounded; rostrum reaching the posterior coxæ.

Long. excl. tegm. of. 16 millim. Exp. tegm. 46 millim.
Hub. Malay Peninsula; Pahang (Craddock).
Allied to T. clio, Walk.

Explanation of Plates XXIX and XXX.

## Plate XXIX.

Fig. 1. Platypleura mackinnoni.
2. " adouma.
3. Pyспа numa.
4. Platypleura makega.
5. Ugada precellens.
6. Pycna hecuba.
7. Mucrotristria nigrosignata.

## Plate XXX.

Fig. 1. Cicada nigrans.
2. Pomponia surya.
3. ", melanoptera.
4. Cicada resta.
5. Hamza bouruensis.
6. Terpnosia ganesa.
7. ", abdullah.
8. Tibicen sankara.
9. Cosmopsaltria khadiga.

